

# PD HaW Datasets characteristics

Paul Lerner

	Dataset Name	Number of subjects	Percentage of male	Average subject age	Tasks	Measurements	Medicated patients
PD	Rosenblum [1]	20	55,0	61.18	1) write their name. 2) copy an address (same address for all).	Displacement, pressure, and pen-tip angle were sampled at 100 Hz	Yes
Controls		20	55,0	61.66			
PD	PaHaW [2]	37	51,4	69.3	1) Archimedean spiral. 2) write "l" 3) write "le" 4) write "les" 5) lektorka 6) porovnat 7) nepopadnout 8) Tramvaj dnes už nepojede	x-coordinate, x[t]; y-coordinate, y[t]; time stamp, s[t]; button status, b[t]; pressure, p[t]; and discrete time t. Button status is a binary variable, being 0 for in-air movement and 1 for on-surface movement.	Yes
Controls		38	52,6	62.4			
PD	NewHandPD [3]	31	67,7	44.05	1) 4 spirals 2) 4 related meanders 3) circle in the air 4) circle on the paper 5) right-handed diadochokinesis 6) left-handed diadochokinesis	<ul style="list-style-type: none"> <li>- CH1: Microphone;</li> <li>• CH 2: Fingergrip;</li> <li>• CH 3: Axial Pressure of ink Refill;</li> <li>• CH 4: Tilt and Acceleration in "X direction";</li> <li>• CH 5: Tilt and Acceleration in "Y direction"; and</li> <li>• CH 6: Tilt and Acceleration "Z direction"</li> </ul>	Yes (confirmed by C. Pereira, mail subject "NewHandPD Dataset")
Controls		35	51,4	57.83			
PD	PDMultiMC [4]	16	75,0	matched	Task 1: Repetitive -cursive letter (letter l) Task 2: triangular wave Task 3: rectangular wave Task 4: Repetitive "Monday" word; Task 5: Repetitive "Tuesday" word; Task 6: Repetitive subject"s name; Task 7: Repetitive subject"s last name;	Spatial displacement (x, y positions), pen pressure, time stamp, pen status and pen-tip angle (altitude, azimuth)	Both on and off
Controls		16	31,3				
PD	Parkinson Disease Spiral Drawings Using Digitized Graphics Tablet [5]	62	?	?	1) Static Spiral Test (SST) 2) Dynamic Spiral Test (DST). 3) Stability Test on Certain Point (STCP).	X ; Y; Z; Pressure; GripAngle;	?
Controls		15	?				

[1] Handwriting as an objective tool for Parkinson's disease diagnosis Sara Rosenblum • Margalit Samuel • Sharon Zlotnik • Ilana Erikh • Ilana Schlesinger 2013

[2] Analysis of in-air movement in handwriting: A novel marker for Parkinson's disease. Peter Drotár a , Jiří Mekyska a , Irena Rektorová b,\* , Lucia Masarová b ,Zdenek Smékal a , Maro

[3] Handwritten dynamics assessment through convolutional neural networks: An application to Parkinson's disease identification. Clayton R. Pereira a , Danilo R. Pereira b , Gustavo H.

[4] Feature Selection for an Improved Parkinson's Disease Identification Based on Handwriting. Catherine Taleb (1)(2), Laurence Likforman-Sulem (2), Maha Khachab (1), Chafic Mokbel

[5] Improved spiral test using digitized graphics tablet for monitoring Parkinson's disease. Muhammed Erdem Isenkul a , Betül Erdogan Sakar b Olcay Kursun